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Contextualizing Work Engagement and Innovative Work Behaviour: The Mediating Role of Learning Goal Orientation

Tan Fee Yean^a, Johanim Johari^{a*}, Khulida Kirana Yahya^a

* Corresponding author: johanim@uum.edu.my

^aSchool of Business Management, College of Business, Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia

Abstract

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The main purpose of this study is to examine the mediating role of learning goal orientation in the work engagement and innovative work behaviour relationship among academicians in the Malaysian public universities. Underpinned by the Broaden-and-Build Theory of Positive Emotions, this study posited that high level of work engagement will promote academicians' innovative work behaviour through learning goal orientation. Data was gathered through questionnaire survey completed by 265 academic staffs from six public universities located in the northern and central regions of Peninsular Malaysia. Using Partial Least Squares Structural Equation Modelling (PLS-SEM), the results indicated that academic staffs who are highly engaged at work would be more likely to report higher level of learning goal orientation, which ultimately tend to engage in innovative work behaviour. Discussions enlighten learning goal orientation as a significant mediator in explicating the work engagement and innovative work behaviour link, which provided full support to the underlying theory.

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Keywords: Work engagement; learning goal orientation; innovative work behaviour; academic staff; public universities.

1. Introduction

The ability of academicians to generate new knowledge and technology for commercialization is the key in ensuring the sustainability of a k-economy. Hence, academicians of Malaysian public universities who are involved in the conception and creation of new knowledge, theories, models, practices, systems, technologies, tools and methods can be considered as one of the important groups of human capital to contribute to the k-economy. Therefore, the issues of innovative work behaviours of



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university academicians need to be highlighted as it can hugely impact academicians' commitment towards their job responsibilities and indirectly influence universities' performance in generating new knowledge and technology required for a k-economy.

Past studies (e.g., Chughtai & Buckley, 2011; Masvaure, Ruggunan & Maharaj, 2014; Montani, Odoardi & Battistelli, 2014) have also revealed that the level of work engagement can influence employees' learning motivation, which in turn yield positive impact on their subsequent work behaviours, such as innovative work behaviour. This suggests that there is an indirect relationship between work engagement and innovative work behaviour. Therefore, learning goal orientation was incorporated as a mediator to provide a better understanding on the relationship between work engagement and innovative work behaviour. This study aims to make a valuable contribution in this particular domain of research, particularly in eradicating the dearth of such literature in the context of public sector and provide a platform on which further research can be established.

Furthermore, prior studies (e.g., Chughtai & Buckley, 2011; Hui, 2013) have explored the influence of work engagement on employees work behaviours such as learning goal orientation and innovative work behaviour. However, these studies were conducted in the private sector, which limits the generalizability of the results in other context. In light of this, the research framework was replicated with the public university's sample; different public universities were included in the sampling frame, and consequently the generalization of the results across Malaysian public universities was made available. As such, this study is specifically conducted to contribute to the growing body of knowledge in Malaysian public universities domain and to examine how academic staffs' innovative work behaviour will be influenced by their work engagement and learning goal orientation.

2. Literature Review

2.2. Innovative Work Behaviour

Innovative is the degree to which an individual engage in the action of generating and adopting something new to solve any kinds of problems that faced in their work systems (Hurt, Joseph & Cook, 1977). As indicated by past studies (West & Farr, 1989; Janssen, 2000), innovative work behaviour can be defined as intentional creation, introduction and application of new ideas within a work role, in order to benefit individual or organizational performance. Based on this definition, innovative work behaviour can be divided into three behavioural tasks as suggested by Janssen (2000), namely (1) idea generation (i.e., the creation of new ideas); (2) idea promotion (i.e., galvanising support for new ideas); and (3) idea realization (i.e., try to apply the new ideas within a work group or organization). Therefore, individual who have engaged in innovative work behaviour are expected to be involved in the combination of these three behavioural tasks at any time.

2.2 Work Engagement

Work engagement can be defined as a positive, fulfilling, work-related psychological state that is characterized by vigour, dedication, and absorption (Schaufeli, Salanova, González-Romá & Bakker, 2002; Balducci, Fraccaroli & Schaufeli, 2010). Vigour is characterized by high levels of energy and mental resilience while working (Balducci et al., 2010), that is the willingness of an individual to invest

extra effort in his/her job. Dedication refers to being strongly involved in one's work and experiencing a sense of significance and enthusiasm towards one's work role (Balducci et al., 2010). Meanwhile, absorption means being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work (Schaufeli & Bakker, 2004; Balducci, et al., 2010).

2.3 Learning Goal Orientation

Learning goal orientation is an individual's stable dispositional trait that demonstrate eagerness in learning and mastering new skills and situations. Learning goal orientation also is an internal mind-set that stimulates an individual to develop his/her competence by acquiring new skills and knowledge (Dweck, 1986). Individuals, who are high on learning orientation, tend to be more confident in their ability to learn. As such, they believe that they can expand their skills and talents through hard-work and determination. For instance, when confronted with trying situations, learning oriented individuals show resilience, escalate effort and transform their strategies to fight for better performance (Dweck, 1986; Dweck & Leggett, 1988; VandeWalle, 2003).

2.4 Hypotheses

Based on the Broaden-and-Build Theory of Positive Emotions, it is posited that the primary influence on individuals' motivation in learning is positive emotions (e.g., vigorous and enthusiastic) that has been experienced by an individual. The pleasant motivation of an individual has the capacity to broaden his or her momentary thought-action repertoires and stimulate him or her to engage in an array of thoughts and actions that come to mind (Chughtai & Buckley, 2011). Therefore, it is posited that:

- H1: Work engagement exerts a positive influence on learning goal orientation.
- H2: Learning goal orientation exerts a positive influence on innovative work behaviour.
- H3: Learning goal orientation mediates the relationship between work engagement and innovative work behaviour.

3. Method

3.1 Sample and Procedure

The sample of this research comprises of academic staff from six Malaysian public universities located in the northern and central regions of Peninsular Malaysia. A technique of purposive sampling was used, in which the number of questionnaires in batches of 100 were equally distributed to each of the participating public university. Out of 600 questionnaires distributed, 283 questionnaires were returned. However, after dropping cases with outliers, 265 questionnaires were retained and usable for further analysis.

The respondents consisted of 146 male and 119 female. Most of the respondents were married (81.5%), and 44.2% of respondents are above 40 years old. In terms of academic achievements, 119 respondents (44.9%) have Master's degree while 146 respondents (55.1%) have Doctoral degree. With regard to job position, only 1.9% of respondents are Tutor, 86 respondents are Lecturers, 138

respondents are holding the position of Senior Lecturer, while 27 respondents are Associate Professor and the rest or 3.4 % were Professor. The majority of the respondents or 37.4% indicated that they have worked in the respective university between four to seven years.

3.2 Measurements

Measures for innovative work behaviour (i.e., nine items) were adapted from Janssen (2000). Meanwhile, learning goal orientation was measured by eight items that was adapted from Button, Mathieu and Zajac (1996). Besides that, the three dimensions of work engagement were measured using a nine-item scale adapted from Balducci et al. (2010). All the responses were made on a 5-point Likert-scale that ranged from (1) almost never to (5) very often except for learning goal orientation.

4. Findings

4.1 Validity and Reliability

Before performing validity analysis, the existence of common method bias was examined using the Harman's single factor test (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). The result indicates that the first factor captured 33.13% of the variance in the data, which did not account for a majority of the variance. Hence, the common method bias did not appear to be a problem in this study.

Table 1. Results of Measurement Model

Model construct	Measurement items	Loading	CR	AVE	R ²
Work engagement	EgV1	0.692	0.901	0.752	-
	EgV2	0.747			
	EgV3	0.560			
	EgD1	0.756			
	EgD2	0.792			
	EgD3	0.785			
	EgA1	0.567			
	EgA2	0.678			
	EgA3	0.756			
Learning goal orientation	LOG1	0.667	0.890	0.504	0.207
	LOG2	0.760			
	LOG3	0.643			
	LOG4	0.666			
	LOG5	0.661			
	LOG6	0.798			
	LOG7	0.765			
	LOG8	0.702			
Innovative work behaviour	IWBg1	0.801	0.931	0.817	0.172
	IWBg2	0.780			
	IWBg3	0.758			
	IWBp1	0.770			
	IWBp2	0.837			
	IWBp3	0.822			
	IWBr1	0.844			
	IWBr2	0.837			
	IWBr3	0.855			

Note: CR = Composite reliability; AVE = Average variance extracted; R² = R square

Next, the measurement model was analysed by few tests that consists of internal consistency (i.e., loading of each items), convergent and discriminant validity. Table 1 depicts the factor loadings of all observed variables, which ranges from 0.560 to 0.855. None of the measurement items were deleted from further analysis. After factor loadings were gathered, composite reliability (CR) and average variance extracted (AVE) were also used to measure convergence validity. As illustrated in Table 1, the value of CR for all variables were above the acceptable value of 0.70 (Hair, Black, Babin, Anderson & Tatham, 2010). In addition, to fulfil convergence validity for all the measures, AVE for all constructs should be greater than 0.50 (Barclay, Thompson & Higgins, 1995). As shown in Table 1, the AVE for each latent construct was greater than the threshold value of 0.50. Thus, it can be concluded that the measurement model of all variables in this study demonstrated adequate convergent validity. Besides that, Table 1 also depicted that 20.7% of the variance of learning goal orientation was explained by work engagement. Meanwhile, 17.2% of the variance in innovative work behaviour was explained by learning goal orientation.

The discriminant validity of the measurement items was tested through the criteria as suggested by Fornell and Larcker (1981). As shown in Table 2, each square root of AVE is more than correlation coefficient, thus discriminant validity is established. This means that there is no multi-collinearity of items in representing their hypothesized latent factors.

Table 2. Discriminant Validity of Constructs

Constructs	1	2	3
1. Work engagement	0.867		
2. Learning goal orientation	0.455	0.710	
3. Innovative work behaviour	0.297	0.414	0.904

Note: Diagonals (in bold) represent the square root of AVE while the other entries represent the correlation coefficients.

4.2 Test of Hypotheses

Before testing the hypotheses, the predictive relevance (Q^2) of the model was tested. To evaluate the predictive validity of a model using PLS, a cross-validated redundancy measure (CV-Red) was assessed via blindfolding procedure (Chin, 2010). Result revealed Q^2 statistic of learning goal orientation and innovative work behaviour were 0.101 and 0.112, respectively, which is greater than 0. Therefore, the model proposed has adequate predictive relevance.

Table 3. Path Coefficient and Hypotheses Testing

Hypothesis Relationship	Direct effect	Indirect effect	<i>t</i> value	Percentile bootstrap 95% confidence interval		Decision
				Lower	Upper	
H1 Work engagement → learning goal orientation	0.455	-	6.889**	-	-	Supported
H2 Learning goal orientation → innovative work behaviour	0.414	-	7.401**	-	-	Supported
H3 Work engagement → Learning goal orientation → innovative work behaviour	-	0.188	5.708**	0.124	0.253	Supported

Note: *t* value > 2.33 = significant at **p<0.01;

The results (Table 3) showed that work engagement had a significant and positive influence on learning goal orientation ($\beta = 0.455$, $p < 0.01$). In a parallel fashion, learning goal orientation was also found to have a substantial influence on innovative work behaviour ($\beta = 0.414$, $p < 0.01$). Hence, H1 and H2 posited earlier in this study were supported.

To test whether learning goal orientation significantly mediate the relationship between work engagement and innovative work behaviour, bootstrapping (500 resamples) was performed to generate standard errors (SE) and t-statistics with the percentile bootstrap 95% confidence interval. If the confidence interval for a mediation hypothesis does not contain zero, it means that the indirect effect between independent and dependent variables is supported (Preacher & Hayes, 2008). The bootstrapping analysis (Table 3) found that learning goal orientation mediate the influence of work engagement on innovative work behaviour. Therefore, H3 is supported.

5. Discussions and Conclusion

This research examined the mediating role of learning goal orientation in explaining the empirical linkage between work engagement and innovative work behaviour. The findings affirmed the notion that work engagement has a direct effect on learning goal orientation. This means a positive state of mind in the form of work engagement will activate academic staffs' learning orientation. The result of this research also implies that academic staffs with a high learning motivation are more likely to exhibit innovative work behaviour. As asserted by Baum et al. (2011), individuals with a strong learning orientation are more prone to engage in 'active experimentation' – in which they are more likely to explore, learn new knowledge through personal experiences in real-life situations and tried to apply it within a work role. The propensity to acquire new knowledge and to integrate it into the existing work systems, encourage academic staffs to act creatively in order to make use of what they have learned. According to Horng et al. (2005), the learning motivation is a good seed for generation of novel ideas. This is because learning is a dialectical process that comprises both access to new knowledge and the ability to assimilate such new knowledge into current knowledge sets (Baum et al., 2011). Given the nature of the job responsibilities of academic staffs, which mainly includes participation in arrays of R & D activities, they need to be keen in learning activities. This helps to improve their capability in the creating, promoting and dissimilating new knowledge, theories, models, practices, systems or methods for the purpose to benefit personal and university's performance. Hence, it is clearly proven that learning oriented academic staffs are more likely to perform innovative work behaviour to solve problems that they faced at the workplace.

5.1 Implications, Recommendations and Conclusion

This research has provided a theoretical implication by giving additional empirical evidence in the domain of Broaden-and-build Theory of Positive Emotions, which posits that a positive state of mind in the form of work engagement will promote individuals' innovative work behaviour through their learning goal orientation. Instead of focusing on the relationship between work engagement and employees' work behaviour in particular setting such as private sectors, this research has extended the application of theory by examining the aforesaid relationship with the samples withdrawn from public

sectors (i.e., Malaysian public universities). This is crucial because focusing on different research setting may expand the practicality of the theory.

The findings of this study also provide useful information to the present and future academic staffs. This is because the core business of academics encompasses mass new ideas creation, promotion and application in their routine work such as research, publication, teaching, supervision and consultancy. All these daily work tasks needs academic staffs to be learning oriented that requires them to be always creative in solving problems and enhancing their job performance that is important to the wealth creation of university. Therefore, the management of university, especially Registrar's Department may consider to redesigning the work environment through innovative-orientated climate to facilitate the opportunity for learning.

As far as the research limitation is concerned, this study only concentrated on academic staffs in Malaysian public universities located in the northern and central regions of Peninsular Malaysia. The study did not include any academic staffs from private universities. Therefore, the results of this study could not be generalized to all academics in private universities as they might have different work cultures and practices that might affect their work-related behaviours. Future researchers should consider widening the scope of population by incorporating academic staffs from private universities.

In summary, the research results have provided support for the key propositions. Most importantly, this study has succeeded in providing empirical evidences pertaining to the link between work engagement, learning goal orientation and innovative work behaviour.

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References

- Arokiasamy, L., Maimunah, I., Aminah, A., & Jamilah, O. (2011). Predictors of academics' career advancement at Malaysian private universities. *Journal of European Industrial*, 35(6), 589-605.
- Chughtai, A. A., & Buckley, F. (2011). Work engagement: Antecedents, the mediating role of learning goal orientation and job performance. *Career Development International*, 16(7), 684-706.
- Baer, M. (2012). Putting creativity to work: The implementation of creative ideas in organizations, *Academy of Management Journal*, 55(5), 1102-1119.
- Balducci, C., Fraccaroli, F., & Schaufeli, W. B. (2010). Psychometric properties of the Italian version of the Utrecht work engagement scale (UWES-9). *European Journal of Psychological Assessment*, 26(2), 143-149.
- Balkar, B. (2015). The relationships between organizational climate, innovative behavior and job performance of teachers. *International Online Journal of Educational Sciences*, 7(2), 81-92.
- Barclay D. W., Thompson, R., & Higgins, C. (1995). The partial least squares (PLS) approach to causal modelling: Personal computer adoption and use an illustration. *Technology Studies*, 2(2), 285-309.
- Baum, J., Bird, B., & Singh, S. (2011). Practical intelligence of entrepreneurs: Antecedents and a link with new venture growth. *Personnel Psychology*, 64(2), 397-425.
- Bozionelos, N. (2003). Intra-organizational network resources: Relation to career success and personality. *International Journal of Organizational Analysis*, 11(1), 41-66.
- Button, S. B., Mathieu, J. E., & Zajac, D. M. (1996). Goal orientation in organizational research: A conceptual and empirical foundation. *Organizational Behaviour and Human Decision Processes*, 67, 26-48.
- Chin, W. W. (2010). How to write up and report PLS analysis. In V. E. Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds.), *Handbook of partial least squares: Concepts, methods and application* (pp. 645-689). New York: Springer.
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41(10), 1040-1048.
- Dweck, C. S., & Leggett, E. L. (1988). A social cognitive approach to motivation and personality. *Psychological Review*, 95(2), 256-273.

- Ferraresi, A. A., Quandt, C. O., dos Santos, S. A., & Frega, J. R. (2012). Knowledge management and strategic orientation: Leveraging innovativeness and performance. *Journal of Knowledge Management*, 16(5), 688 – 701.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and build theory of positive emotions. *American Psychologist*, 56(3), 218-226.
- Fredrickson, B. L. (2003). The value of positive emotions: The emerging science of positive psychology is coming to understand why it's good to feel good. *American Scientist*, 91, 330-335.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River: Prentice Hall.
- Horng, J. S., Hong, J. C., Chanlin, L. J., Chang, S. H., & Chu, H. C. (2005). Creative teachers and creative teaching strategies. *International Journal of Consumer Studies*, 29(4), 352-258.
- Hui, K. P. (2013). A model of goal orientation, work engagement, job related learning, need for achievement and innovation (Doctoral dissertation). Retrieved from <http://hdl.handle.net/1959.13/1037063>
- Hurt, T. H., Joseph, K., & Cook, C. D. (1977). Scales for the measurement of innovativeness. *Human Communication Research*, 4(1), 58-65.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287-302.
- Li, X., & Zheng, Y. (2014). The influential factors of employees' innovative behavior and the management advices. *Journal of Service Science and Management*, 7, 446-450.
- Malaysian Science and Technology Information Centre (MASTIC). (2010). National innovation model: Market and technology driven innovation for wealth creation and societal wellbeing. Retrieved October 20, 2011 from <http://www.mosti.gov.my/mosti/images/pdf/innovation%20model%20jtpin.pdf>.
- Masvaure, P., Ruggunan, S., & Maharaj, A. (2014). Work engagement, intrinsic motivation and job satisfaction among employees of a diamond mining company in Zimbabwe. *Journal of Economics and Behavioural Studies*, 6(6), 488-499.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77, 11-37.
- Montani, F., Odoardi, C., & Battistelli, A. (2014). Individual and contextual determinants of innovative work behaviour: Proactive goal generation matters. *Journal of Occupational and Organizational Psychology*, 87(4), 645-670.
- Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behaviour at work. *Journal of Applied Psychology*, 91(3), 636-652.
- Peng, D. X., & Lai, F. (2012). Using partial least squares in operations management research: A practical guideline and summary of past research. *Journal of Operations Management*, 30, 467-480.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior*, 25, 293-315.
- Schaufeli, W. B., Salanova, M., Gonza'lez-Roma', V. and Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71-92.
- Sekaran, U. (2003). *Research methods for business: A skill building approach* (4th ed.). Chichester: John Wiley.
- Sonnentag, S. (2003). Recovery, work engagement and proactive behaviour: A new look at the interface between non-work and work. *Journal of Applied Psychology*, 88(3), 518-28.
- Stoffers, J., Neessen, P., & val Dorp, P. (2015). Organizational culture and innovative work behaviour: A case study of a manufacturer of packaging machines. *American Journal of Industrial and Business Management*, 5, 198-207.
- Sujan, H., Weitz, B. A., & Kumar, N. (1994). Learning orientation, working smart and effective selling. *Journal of Marketing*, 58(3), 39-52.
- VandeWalle, D. (2001). Why wanting to look successful doesn't always lead to success. *Organizational Dynamics*, 30(2), 162-171.
- VandeWalle, D. (2003). A goal orientation model of feedback seeking behaviour. *Human Resource Management Review*, 13(4), 581-604.
- West, M. A., & Farr, J. L. (1989). Innovation at work: psychological perspectives. *Social Behavior*, 4, 15-30.
- World Bank. (2008). *Measuring knowledge in the world's economies: Knowledge assessment methodology and knowledge economy index*. Retrieved October 20, 2011 from http://siteresources.worldbank.org/INTUNIKAM/Resources/KAM_v4.pdf.